

Notice of Allowability**Application No.**

10/582,219

Applicant(s)

MELZ ET AL.

Examiner

Paul A. Chenevert

Art Unit

3612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment filed 09OCT08.
2. ☒ The allowed claim(s) is/are 21-25 and 27-40.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 2009 02 04.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Donald E. Stout on 04FEB09.
3. The application has been amended as follows:

Paragraph 0013;

Line 2, --the vibration behavior-- has been inserted after "the rigidity behavior,".

Paragraph 0019:

Line 5, "at" has been changed to --and--.

Abstract:

Line 1, "is disclosed for providing" has been changed to --provides--.

Claim 21:

Line 10, "interlock." has been changed to --interlock; and

wherein the transformable material is made of at least one of: piezo-ceramics, piezo-polymers, electrostrictive ceramics, electrorheological fluids, polymer gels, magnetorheological fluids, shape-memory alloys, shape-memory polymers.--

Claim 26 has been deleted.

4. The following is an examiner's statement of reasons for allowance: the prior art does not show or make obvious Applicant's shape transformable material employed to interlock a door and a vehicle body. Other prior art (such as U.S. Patent No. 6,312,045 B2) teach interlocking a vehicle door to the vehicle body by a 'broadly-defined' shape transformable material. As broadly claimed, a shape transformable material includes both Shape Memory Alloys (SMA) and conventional lock pin actuators, which both materials change shape in response to an input of energy. The conventional lock pin actuator (i.e. solenoid) translates due to energy input. The lock pin of the conventional lock pin actuator translates outwardly, thus locking the vehicle door to the vehicle body. The Applicants' invention differs from conventional lock pin actuators in that the shape transformable material is made of at least one of: piezo-ceramics, piezo-polymers, electrostrictive ceramics, electrorheological fluids, polymer gels, magnetorheological fluids, shape-memory alloys, shape-memory polymers.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul A. Chenevert whose telephone number is (571)272-6657. The examiner can normally be reached on Mon-Fri (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn D. Dayoan can be reached on 571-272-6659. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/GLENN DAYOAN/
Supervisory Patent Examiner, Art Unit 3612

Paul A. Chenevert
Examiner
Art Unit 3612

PAC
04FEB09